C L A I M S

1. Method of transmitting information by means of digital transmission signals, in particular radio signals, wherein the transmission signals have a predeterminable transmission frequency, and wherein the transmission frequency is converted in a signal receiver, **characterized in** that the conversion occurs by superposing a transmission signal with at least one additional signal of a predeterminable frequency on a component with a linear characteristic curve, and that the frequency of the additional signal is selected such that the superposition generates a beat pattern.

2. Method of claim 1, characterized in that the frequency of the additional signal is close to the transmission frequency of the transmission signal.

3. Method of claim 1 or 2, characterized in that the transmission signals are prefiltered before the superposition.

4. Method of one of claims 1-3, characterized in that the transmission signals are amplified before the superposition.

5. Method of one of claims 1-4, characterized in that the level of the additional signal is adapted to the transmission signal.

6. Method of one of claims 1-5, characterized in that the level of the transmission signal is adapted to the additional signal.

7. Method of one of claims 1-6, characterized in that the alternating voltage of the beat pattern is amplified.

8. Method of one of claims 1-7, characterized in that the detection of the transmission signals occurs by counting the signal extremes that result in the beat pattern, preferably by means of a threshold switch.

9. Method of one of claims 1-8, characterized in that the detection of the transmission signals occurs by comparing the integrated signal power from predeterminable time windows of the beat pattern.

10. Method of claim 9, characterized in that at least one time window is selected.

11. Method of claim 9 or 10, characterized in that the time windows are selected both in the chronological midrange and in least one edge range of the beat pattern.

12. Method of one of claims 1-11, characterized in that at least one additional signal is associated to each transmission frequency.

13. Method of one of claims 1-12, characterized in that the frequency of the additional signal is selected between the transmission frequency and a directly adjacent, further transmission frequency.

14. Method of one of claims 1-13, characterized in that the frequency of the additional

signal is selected outside the center between two adjacent transmission frequencies.

15. Method of one of claims 1-12, characterized in that a directly adjacent transmission frequency is selected as the frequency of the additional signal.

16. Method of one of claims 1-12, characterized in that two symmetrically present, equidistant transmission frequencies are selected as the frequency of the additional signal.

17. Method of claim 16, characterized in that both directly adjacent, equidistant transmission frequencies are selected as the frequency of the additional signal.

18. Method of one of claims 1-17, characterized in that a signal transmitter and the signal receiver are synchronized.

19. Method of one of claims 1-18, characterized in that a radio clock is associated to the signal transmitters and signal receivers.

20. Method of one of claims 1-19, characterized in that the signal transmitters and signal receivers transmit and receive according to a predeterminable timing sequence.

21. Method of claim 20, characterized in that the timing sequence is controlled via a radio clock.

22. Method of one of claims 1-21, characterized in that the transmission frequency is transmitted and received with a right-hand and a left-hand polarization alternating with each other.

23. Method of one of claims 1-22, characterized in that the component is an electrooptical component.